Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

Claims 1-9 (canceled)

Claim 10 (previously presented) A modular implant for insertion into a femur adjacent a hip joint, the implant comprising:

a proximal body component having a top end for engaging the hip joint, a bottom end for insertion into the femur, a medial side, a lateral side, a neck formed adjacent the top end and a bore formed into the bottom end, the bore having a bore opening and an interior surface forming a female side of a male/female junction, the bore having a longitudinal junction axis;

a stem component having a first end for engaging the proximal body component a second end for insertion into the femur, and a projection formed adjacent the first end, the projection having an exterior surface forming a male side of the male/female junction, the projection being engageable with the bore in male/female seating arrangement along the junction axis, the male and female sides contacting one another adjacent the bore opening, the contact between the male and female sides adjacent to the bore opening on the lateral side being offset longitudinally toward the top end relative to the contact between the male and female sides adjacent the bore opening on the medial side.

11. (original) The implant of claim 10 wherein the bore and the projection form complimentary tapers, the tapers narrowing from the bottom end toward the top end and from the second end toward the first end.

12. (previously presented) The implant of claim 10 wherein the proximal body component has an exterior surface spaced from the interior surface of the bore, the exterior and interior surfaces defining a wall between them, the wall having a wall thickness that increases over a portion of the wall between the bottom end and the top end as the bore taper diverges inwardly from the exterior wall in a direction generally parallel to the junction axis such that the contact between the male and female sides adjacent the bore opening on the lateral side is offset in the direction of increasing wall thickness.

13. (original) The implant of claim 10 further comprising a femoral head component supported on the neck of the proximal body component and an acetabular component engageable with the femoral head component.

14. (canceled)

15. (canceled)

16. (new) The implant of claim 10 wherein the bore opening is transverse to the junction axis.

17. (new) The implant of claim 10 wherein the implant further includes a joint load receiving head and further wherein the medial side is generally in compression in use and the lateral side is generally in tension in use such that the contact between the male and female sides adjacent the bore opening is offset longitudinally toward the top end on the tensile side of the implant.

18. (new) The implant of claim 10 wherein the proximal body component has an exterior surface spaced from the interior surface of the bore, the exterior and interior surfaces defining a wall

between them, the wall having a stiffness that increases over a portion of the wall between the bottom end and the top end in a direction generally parallel to the junction axis, the projection further having a stiffness, such that the contact between the male and female sides adjacent to the bore opening on the lateral side is offset in the direction of increasing wall stiffness.

19. (new) The implant of claim 10 wherein the bore opening adjacent the lateral side is offset radially away from the projection.